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in the case where a liquid droplet is deposited onto said resistor film, said applied voltage is controlled to a value smaller than a voltage which is applied to said resistor film at the time of measuring a maximum specified measuring range or said supply current is controlled to a value smaller than a current flowing in said resistor film at the time of measuring the maximum specified measuring range.

A2
Sub B2
3. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

a first resistor film, which is provided on a thin portion formed on a silicon substrate, is arranged in a suction pipe of the internal combustion engine and emits heat to a measuring fluid through said first resistor film and generates heat and a second resistor film whose resistance value changes in accordance with an ambient temperature; and

a control circuit which has a bridge circuit including said second resistor film and controls a voltage to be applied to said first resistor film or a current to be supplies, said control circuit being configured such that,

in the case where an output of said bridge circuit is larger than a certain value, said applied voltage is controlled to a value smaller than a voltage which is applied to said first resistor film at the time of measuring a maximum specified measuring range or said supply current is controlled to a value smaller than a current flowing in said first resistor film at the time of measuring the maximum specified measuring range.

5. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

123 an exothermic resistor arranged in a measuring fluid and emitting heat to a measuring fluid;

a control circuit for controlling a voltage to be applied to said resistor or a current to be supplied;

first limiting means for limiting said applied voltage or said supplied current to a value which is equal to or less than a first value; and

second limiting means for limiting said applied voltage or said supplied current to a value which is equal to or less than a second value smaller than said first value,

said control circuit being configured such that, in the case where a liquid droplet is deposited onto said resistor, said applied voltage or said supplied current is limited to a value which is equal to or less than said second value.

12. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

124 an exothermic resistor arranged in a measuring fluid and emitting heat to said measuring fluid; and

a control circuit for controlling a voltage to be applied to said resistor or a current to be supplied, said control circuit being configured such that,

in the case where a liquid droplet is deposited onto said resistor, said control circuit controls said applied voltage or said supplied current so that a generation heat amount per unit area of said resistor is smaller than an amount

of heat by which a burn-out occurs at an interface between said resistor and said liquid droplet.

13. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

A4
an exothermic resistor arranged in a measuring fluid and emitting heat to said measuring fluid; and

a control circuit for controlling a voltage to be applied to said resistor or a current to be supplied, said control circuit being configured such that,

in the case where a liquid droplet is deposited onto said resistor, said control circuit controls said applied voltage or said supplied current so that a generation heat amount per unit area of said resistor is smaller than a predetermined value.

18. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

Sub 33
a first resistor which is arranged in a measuring fluid and generates heat emitted to said measuring fluid, and a second resistor whose resistance value changes in accordance with an ambient temperature;

a control circuit which has a bridge circuit including said second resistor and controls a voltage to be applied to said first resistor or a current to be supplied;

first limiting means for limiting said applied voltage or said supply current to a value which is equal to or less than a first value; and

second limiting means for limiting said applied voltage or said supply current to a value which is equal to or less than a second value smaller than said first value,

said control circuit being configured such that, in the case where an output of said bridge circuit is larger than a certain value, said control circuit limits said applied voltage or said supplied current to a value which is equal to or less than said second value.

22. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

a first resistor which is arranged in a measuring fluid and generates heat emitted to said measuring fluid, and a second resistor whose resistance value changes in accordance with an ambient temperature, and

a control circuit which has a bridge circuit including said second resistor and controls a voltage to be applied to said first resistor or a current to be supplied, said control circuit being configured such that,

in the case where an output of said bridge circuit is larger than a certain value, said control circuit controls said applied voltage or said supplied current to a value which is smaller than a heat amount by which a burn-out occurs at an interface between said first resistor and a liquid droplet.

23. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

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a first resistor which is arranged in a measuring fluid and generates heat emitted to said measuring fluid, and a second resistor whose resistance value changes in accordance with an ambient temperature; and

a control circuit which has a bridge circuit including said second resistor and controls a voltage to be applied to an exothermic resistor or a current to be supplied, said control circuit being configured such that,

in the case where an output of said bridge circuit is larger than a certain value, said control circuit controls said applied voltage or said supplied current so that a generation heat amount per unit area of said first resistor is smaller than a predetermined value.

A7

29. (Amended) A hot-wire type air flow meter for an internal combustion engine, comprising:

an exothermic resistor arranged in a suction pipe of said internal combustion engine wherein heat is emitted to an air through said resistor;

a control circuit for controlling a voltage to be applied to said resistor or a current to be supplied; and

transmitting means for transmitting a specific signal to a control unit of said internal combustion engine in the case where a liquid droplet is deposited onto said resistor.

REMARKS

The Examiner and her supervisor, Mr. Fuller, are thanked for the courtesy of the interview conducted with the undersigned on July 17, 2002. The undersigned believes that the Interview Summary accurately reflects what